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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/634,529

08/05/2003

Joseph A. Starr

1-21434

6057

46582

7590

08/10/2006

MACMILLAN, SOBANSKI & TODD, LLC  
ONE MARITIME PLAZA - FOURTH FLOOR  
720 WATER STREET  
TOLEDO, OH 43604

EXAMINER

KING, BRADLEY T

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/634,529	<b>Applicant(s)</b> STARR ET AL.	
	<b>Examiner</b> Bradley T. King	<b>Art Unit</b> 3683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-30 and 34 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5590936.

US 5590936 discloses all the limitations of the instant claims including; a valve seat body 481, said valve seat body having a valve passageway 452 extending through a portion of said valve seat body, a groove 457 formed circumferentially in an outer surface of said valve seat body, said groove defining a first groove surface, a bore 453 extending between said groove surface and said valve passageway to provide fluid communication between said groove surface and said valve passageway; and a substantially resilient seal 487 slidably mounted about said first groove surface, said seal slidably movable between a first position substantially covering said bore and a second position exposing said bore to permit the flow of fluid within said groove to said valve passageway through said bore. See figure 8.

Regarding claim 10, see figure 7.

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Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by LeVey et al US 6298873.

US 6298873 discloses all the limitations of the instant claims including; a valve seat body 30, said valve seat body having a valve passageway 52 or 64 extending through a portion of said valve seat body, a groove 24 or 44 formed circumferentially in an outer surface of said valve seat body, said groove defining a first groove surface 22 or 45, a bore 58 or 68 extending between said first groove surface and said valve passageway to provide fluid communication between said first groove surface and said valve passageway; and a substantially resilient seal 72 or 76 slidably mounted about said groove surface, said seal slidably movable between a first position substantially covering said bore and a second position exposing said bore to permit the flow of fluid within said groove to said passageway through said bore.

Regarding claim 5, note that the first groove surface tapers to a degree and therefore requires one of the two bordering walls to be at a slightly acute angle.

Claims 1-5 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5762103.

US 5762103 discloses all the limitations of the instant claims including; a valve seat body 22, said valve seat body having a valve passageway 16 extending through a portion of said valve seat body, a groove 30 formed circumferentially in an outer surface of said valve seat body, said groove defining a first groove surface, a bore 28 extending between said groove surface and said valve passageway to provide fluid communication between said groove surface and said valve passageway; and a

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substantially resilient seal 14 slidably mounted about said first groove surface, said seal slidably movable between a first position substantially covering said bore and a second position exposing said bore to permit the flow of fluid within said groove to said valve passageway through said bore. See figures 1-2. Also note that while the normal mode of operation of the seal is a tilting movement, the seal is capable of sliding.

Regarding claim 7, note surface 40 is "about" 45 degrees.

### ***Allowable Subject Matter***

Claims 11 and 21 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 16 and 26, directed to the species of figure 5 are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, claim 6, directed to the species of figure 5 remain withdrawn from consideration since it does not depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claims 11-30 and 34 are allowed.

### ***Response to Arguments***

Applicant's arguments filed 5/30/2006 have been fully considered but they are not persuasive.

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Regarding Reuter, the piston 481, groove 457, seal 487 and bore 453 structure function as and can be reasonably interpreted as being a valve body/valve seat arrangement as broadly defined by the claims. While the arrangement may be located on a piston, the structure still functions as a valve and can be considered and valve body/valve seat. Also note column 13, lines 18-25.

In response to applicant's arguments regarding LeVey and Gregoire, the recitation "for a control valve of a vehicle brake system" has not been given patentable weight because the recitation occurs in the preamble and further appears to be an intended use recitation. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding LeVey, it is maintained that the structure is capable of some degree of sliding against the groove surface. Also note column 3, lines 20-30. Some degree of slidability is inherent to the "play" between the two surfaces. Further note that the claims only require "slidably mounted". It is maintained that LeVey shows a connection cable of sliding movement.

Regarding US 5762103, it is maintained that the seal is capable of sliding on the groove surface. Note the claims do not require the sliding movement to be in response to any pressure or fluid flow or that the seal slide during normal operation.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

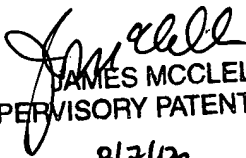
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BTK

  
JAMES MCCLELLAN  
SUPERVISORY PATENT EXAMINER  
8/7/00